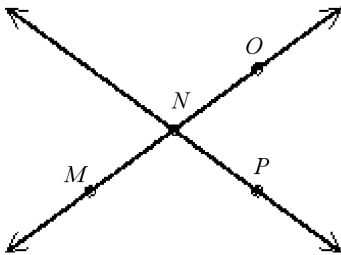


Geometry

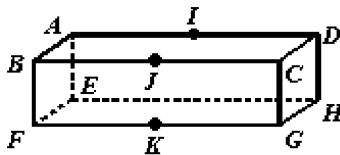
Practice Mid-term Exam - Quarter 1

Kuhowski

1. Are O , N , and P collinear? If so, name the line on which they lie.

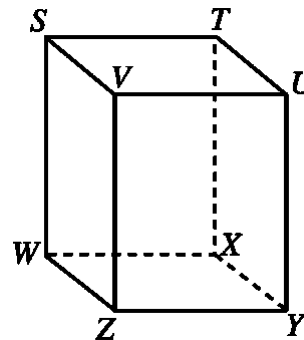


- No, the three points are not collinear.
 - Yes, they lie on the line MP .
 - Yes, they lie on the line NP .
 - Yes, they lie on the line MO .
2. Name the plane represented by the front of the box.



- FBC
- BAD
- FEC
- FKG

3. What is the intersection of plane $TUYX$ and plane $VUYZ$?

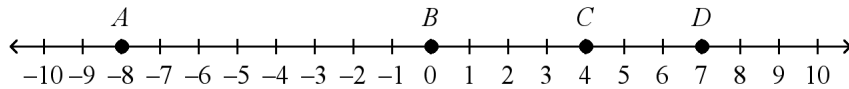


- \overleftrightarrow{UY}
 - \overleftrightarrow{SW}
 - \overleftrightarrow{TX}
 - \overleftrightarrow{VZ}
4. Name the ray in the figure.



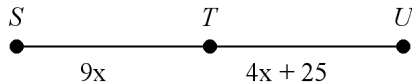
- \overrightarrow{BA}
- \overleftrightarrow{AB}
- \overline{BA}
- \overrightarrow{AB}

5. Find
- AC
- .

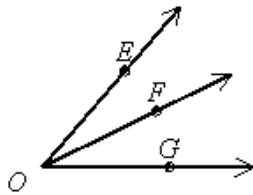


- a. 14 b. 15 c. 12 d. 4

6. If
- T
- is the midpoint of
- \overline{SU}
- , find the values of
- x
- and
- ST
- . The diagram is not to scale.



- a. $x = 5, ST = 45$
 b. $x = 5, ST = 60$
 c. $x = 10, ST = 60$
 d. $x = 10, ST = 45$
7. Which point is the midpoint of \overline{AE} ?
-
- a. D
 b. B
 c. not B, C , or D
 d. C
8. If $m\angle EOF = 26$ and $m\angle FOG = 38$, then what is the measure of $\angle EOG$? The diagram is not to scale.



- a. 64
 b. 12
 c. 52
 d. 76
9. The complement of an angle is 25° . What is the measure of the angle?
- a. 75°
 b. 155°
 c. 65°
 d. 165°

- 10.
- $\angle 1$
- and
- $\angle 2$
- are supplementary angles.
-
- $m\angle 1 = x - 39$
- , and
- $m\angle 2 = x + 61$
- . Find the measure of each angle.

- a. $\angle 1 = 79, \angle 2 = 101$
 b. $\angle 1 = 40, \angle 2 = 140$
 c. $\angle 1 = 40, \angle 2 = 150$
 d. $\angle 1 = 79, \angle 2 = 111$

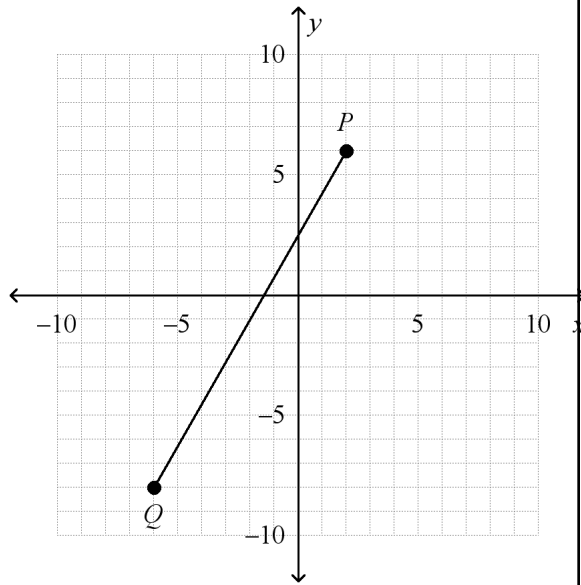
11. Find the distance between points
- $P(8, 2)$
- and
- $Q(3, 8)$
- to the nearest tenth.

- a. 11
 b. 7.8
 c. 61
 d. 14.9

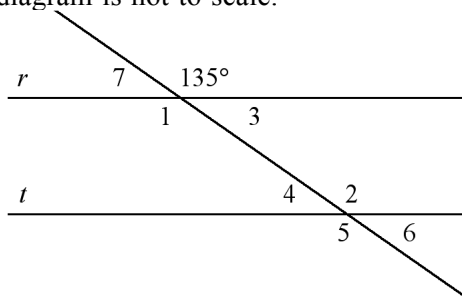
12. Find the coordinates of the midpoint of the segment whose endpoints are
- $H(8, 2)$
- and
- $K(6, 10)$
- .

- a. $(7, 6)$
 b. $(1, 4)$
 c. $(14, 12)$
 d. $(2, 8)$

13. Find the midpoint of
- \overline{PQ}
- .

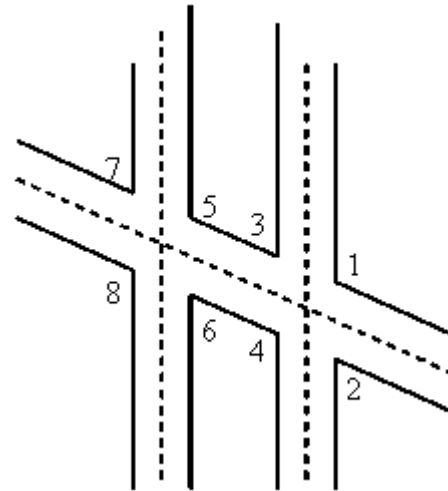


- a. $(-3, -1)$
 b. $(-2, 0)$
 c. $(-2, -1)$
 d. $(-3, 0)$
14. Line r is parallel to line t . Find $m\angle 5$. The diagram is not to scale.

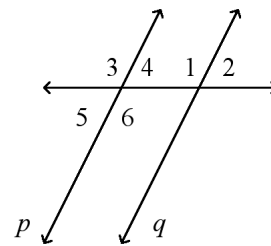


- a. 45
 b. 35
 c. 135
 d. 145

This diagram of airport runway intersections shows two parallel runways. A taxiway crosses both runways.

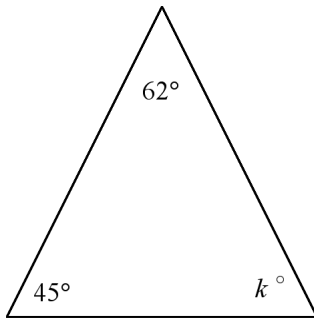


15. How are $\angle 6$ and $\angle 2$ related?
 a. corresponding angles
 b. alternate interior angles
 c. same-side interior angles
 d. none of these
16. $m\angle 1 = 6x$ and $m\angle 3 = 120$. Find the value of x for p to be parallel to q . The diagram is not to scale.

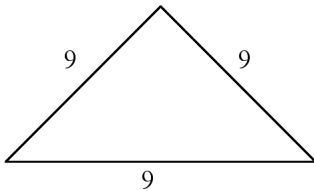


- a. 114
 b. 126
 c. 120
 d. 20

17. Find the value of k . The diagram is not to scale.

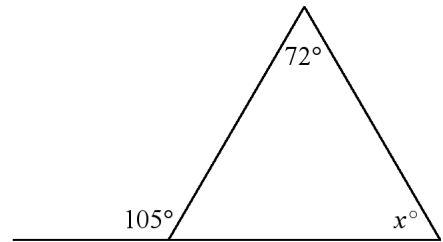


- a. 17
b. 73
c. 118
d. 107
18. Classify the triangle by its sides. The diagram is not to scale.

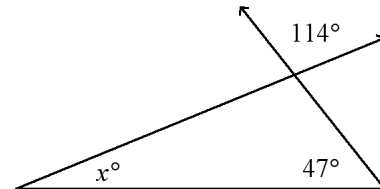


- a. straight
b. scalene
c. isosceles
d. equilateral
19. Classify $\triangle ABC$ by its angles, when $m\angle A = 32$, $m\angle B = 85$, and $m\angle C = 63$.
- a. right
b. straight
c. obtuse
d. acute

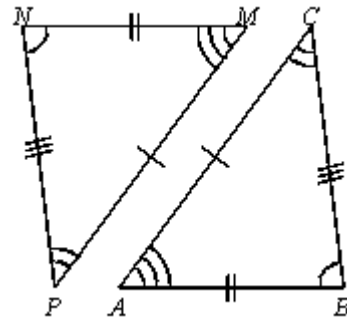
20. Find the value of x . The diagram is not to scale.



- a. 33
b. 162
c. 147
d. 75
21. Find the value of the variable. The diagram is not to scale.



- a. 66
b. 19
c. 29
d. 43
22. $\angle ABC \cong$?

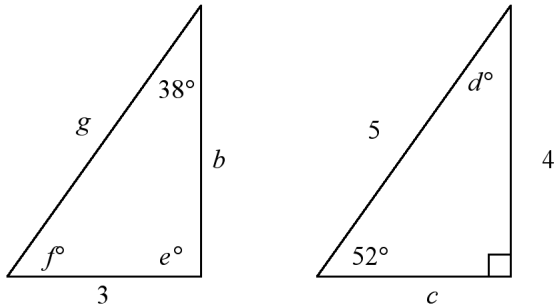


- a. $\angle PMN$
b. $\angle NPM$
c. $\angle NMP$
d. $\angle MNP$

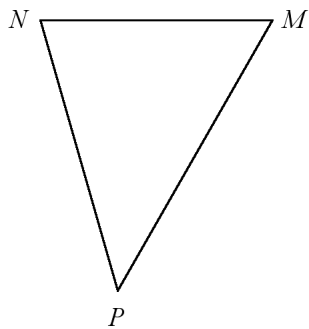
Name: _____

ID: A

23. The two triangles are congruent as suggested by their appearance. Find the value of c . The diagrams are not to scale.



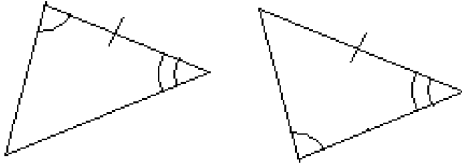
- a. 4 b. 5 c. 3 d. 38
24. Given $\triangle QRS \cong \triangle TUV$, $QS = 3v + 2$, and $TV = 7v - 6$, find the length of QS and TV .
- a. 2
b. 9
c. 8
d. 20
25. Name the angle included by the sides \overline{PN} and \overline{NM} .



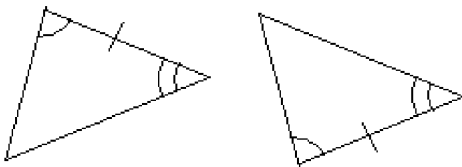
- a. $\angle N$
b. $\angle P$
c. $\angle M$
d. none of these

26. In each pair of triangles, parts are congruent as marked. Which pair of triangles is congruent by ASA?

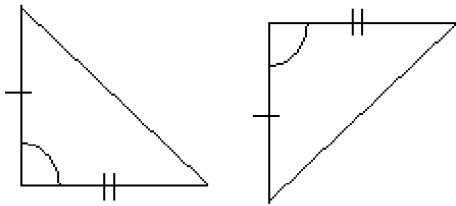
a.



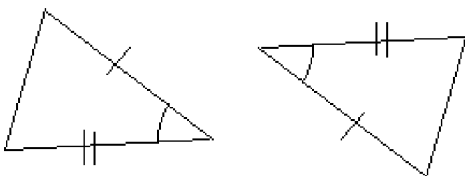
b.



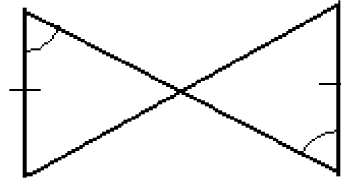
c.



d.

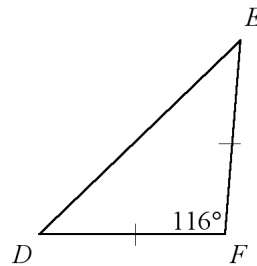


27. Can you use the ASA Postulate, the AAS Theorem, or both to prove the triangles congruent?



- a. either ASA or AAS
b. ASA only
c. AAS only
d. neither

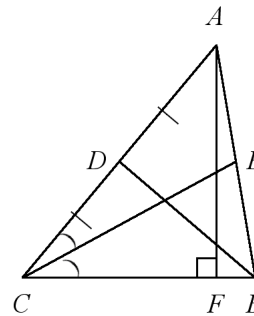
28. Use the information in the figure. Find $m\angle D$.



Drawing not to scale

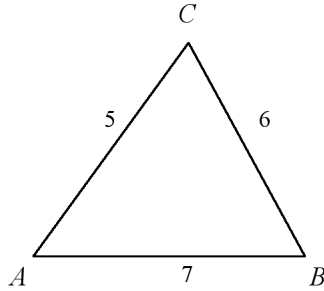
- a. 32°
b. 122°
c. 64°
d. 58°

29. Name a median for $\triangle ABC$.

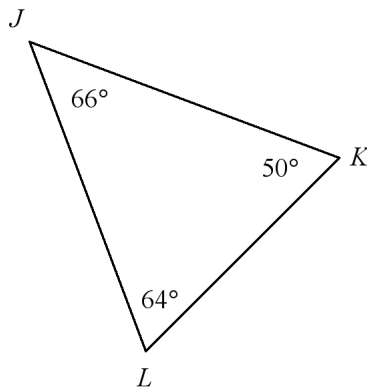


- a. \overline{AD}
b. \overline{CE}
c. \overline{AF}
d. \overline{BD}

30. Name the smallest angle of $\triangle ABC$. The diagram is not to scale.



- a. $\angle A$
 b. $\angle C$
 c. Two angles are the same size and smaller than the third.
 d. $\angle B$
31. List the sides in order from shortest to longest. The diagram is not to scale.



- a. $\overline{LK}, \overline{LJ}, \overline{JK}$
 b. $\overline{LJ}, \overline{LK}, \overline{JK}$
 c. $\overline{LJ}, \overline{JK}, \overline{LK}$
 d. $\overline{LK}, \overline{JK}, \overline{LJ}$

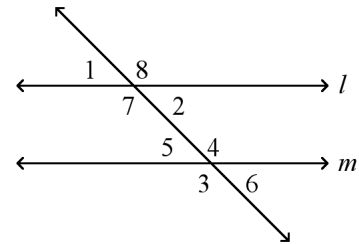
32. Which three lengths can NOT be the lengths of the sides of a triangle?

- a. 23 m, 17 m, 14 m
 b. 11 m, 11 m, 12 m
 c. 5 m, 7 m, 8 m
 d. 21 m, 6 m, 10 m

33. If $\frac{a}{b} = \frac{5}{3}$, then $3a = \underline{\hspace{2cm}}$.

- a. $3b$
 b. $10b$
 c. $5b$
 d. $6b$

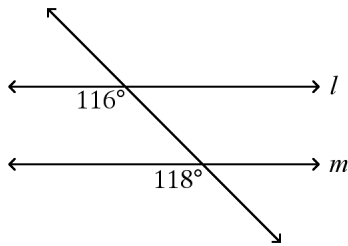
34. Identify the pair of angles as *corresponding*, *alternate interior*, *both*, or *neither*.



$\angle 6, \angle 2$

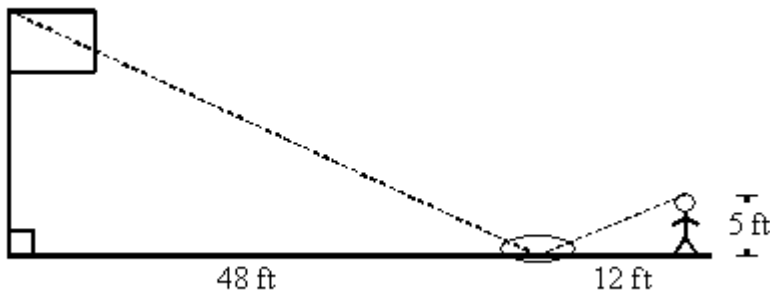
- a. alternate interior
 b. neither
 c. corresponding
 d. both

35. Is line l parallel to line m ? Explain.

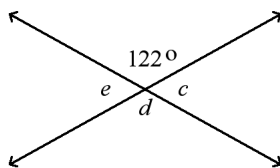


Not drawn to scale

- No; alternate interior angles are not congruent.
 - Yes; alternate interior angles are congruent.
 - No; corresponding angles are not congruent.
 - Yes; corresponding angles are congruent.
36. Michele wanted to measure the height of her school's flagpole. She placed a mirror on the ground 48 feet from the flagpole, then walked backwards until she was able to see the top of the pole in the mirror. Her eyes were 5 feet above the ground and she was 12 feet from the mirror. Using similar triangles, find the height of the flagpole to the nearest tenth of a foot.

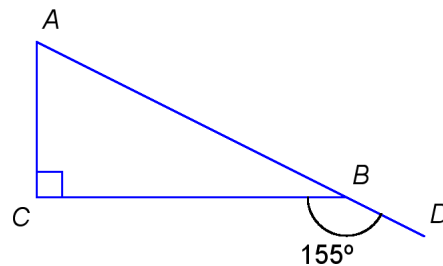


- 20 ft
 - 38.4 ft
 - 55 ft
 - 25 ft
37. What is the value of e ?



- 212°
- 302°
- 58°
- 122°

38. What is the measure, in degrees, of $\angle ABC$?

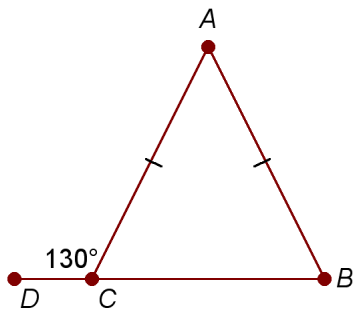


- 65°
- 25°
- 77.5°
- 90°

Name: _____

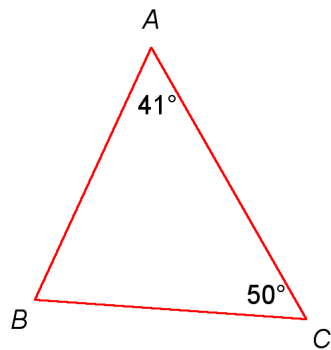
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39. Triangle ABC , shown in the diagram below, is an isosceles triangle.



If the measure of $\angle ACD$ is 130° , what is the measure of $\angle ABC$?

- a. 50°
 - b. 65°
 - c. 130°
 - d. 220°
40. What is the measure of $\angle ABC$?



- a. 94°
- b. 79°
- c. 269°
- d. 89°

**Geometry
Answer Section****Practice Mid-term Exam - Quarter 1****Kuhowski**

1. A
2. A
3. A
4. A
5. C
6. A
7. A
8. A
9. C
10. B
11. B
12. A
13. C
14. C
15. A
16. D
17. B
18. D
19. D
20. A
21. B
22. D
23. C
24. C
25. A
26. B
27. A
28. A
29. D
30. D
31. C
32. D
33. C
34. C
35. C
36. A
37. C
38. B
39. A
40. D